PAPERS ON FINANCIAL PROBLEMS OF PUBLIC UNDERTAKINGS

(SUBMITTED TO THE ADMINISTRATIVE REFORMS COMMISSION)

1. APPRAISAL OF THE MANAGEMENT'S PERFORMANCE IN PUBLIC ENTERPRISES.
2. PRICE POLICY OF PUBLIC UNDERTAKINGS.
3. BUDGETING IN PUBIC ENTERPRISES.

BY

G. P. KESHAVA Ph.D.

THE INDIAN INSTITUTE OF PUBLIC ADMINISTRATION
NEW DELHI-1.

C O N T E N T S

ion

RECORD COPY U6-54 India

Appraisal of the Management's Performance in Public Enterprises.

The problem of measuring the management's performance in the public sector is much more difficult than in the private sector. Absence of objective tests for the purpose often gives rise to unfounded allegations against the management, which on closer examination may turn out to be rather unjustified. Not unoften, the performance of the management in the public sector is judged on the same criteria as are generally applicable to private enterprises. One such criterion is that of profitability. The management of not a few public enterprises has been subjected to bitter criticism for its inability to ensure adequate financial returns on the capital invested in the enterprise. Criticisms on this ground are, however, seldom based on an adequate appreciation of such relevant factors as the long period of gestation of investment and the obligations of the enterprise in regard to the welfare of the employees. On the other hand, the accrual of appreciable financial returns tends to be regarded as an index of the management's performance whereas it may be just because of the monopoly market situation of the enterprise that the results in question are realised.

This paper deals with some of the methodological and administrative issues relating to the appraisal of the

management's performance in the public enterprise sector in India. The first section is devoted to some conceptual problems arising in this connection. In the next section the criteria for measuring management's performance are discussed. The third section deals with some general issues pertaining to appraisal on the basis of the criteria suggested in the previous section. The next two sections explain the type of statistical analysis that would be needed for the purpose. In the last section, an attempt is made to bring out some of the administrative implications of undertaking this task on an organised and institutional basis.

1. Concept and Focus

At the outset it may be useful to define the term "management" with reference to a public enterprise. What is known as the "management" of a large organisation is usually a fairly vast and complex structure, consisting of various levels of decision making. The performance of each level of management, comprising a distinct level of decision making, can be evaluated with reference to the responsibilities that it is expected to discharge. Thus, if the management is looked at as a structure, the performance of management tends to become a nebulous concept unless we evolve a method of synthesizing the performance of the different levels of management into a composite index, which, of course, is a logically impossible task.

Within the management structure, however, usually there is a definite hierarchy characterised by accountability of each level of management to the next higher level, on the one hand, and the authority exercised by each level of management over the lower level, on the other. The ultimate responsibility for the performance of each level of management is borne by the decision making authority at the top level, which in the case of public enterprise may consist of the control board or the chief executive, or both, depending upon the distribution of authority between the two.* If managerial authority is looked at as flowing from or converging on one single body, the management of the enterprise can be identified with that single body or authority. In what follows the term "management" will be used to signify the top decision making authority in the enterprise.

The performance of the management of the enterprise, defined in this way, needs to be distinguished from the performance of the enterprise as such. This is important because much of the presently existing confusion and loose thinking on the question can be attributed to an inadequate appreciation of the difference between the two.

---

* In a typical company-type organisation, the control board would consist of the Board of Directors and the Managing Director would be the chief executive.

Basically, the difference between the performance of the management and that of the enterprise in its entirety may be said to flow from the fact that judgment in regard to the latter implicates a wider focus of inquiry than that in regard to the former. Management is just one agent of production, whereas the enterprise represents a combined operation of a number of agents of production. The performance of the management has to be evaluated with reference to the limited role that it has to perform in the enterprise - one agent of production. In evaluating the performance of the enterprise, however, the end results flowing from the operation of the enterprise have to be judged not only with reference to the immediate possibilities in this regard but also with reference to what would have been achieved if the scarce resources invested in the enterprise were shifted to some other activities.

The validity of this distinction flows from the fact that in the case of most enterprises there is a technical line of demarcation between the management of the enterprise and the Government, represented by the parent Ministry. From the administrative point of view it is an important distinction because it delineates the area of authority between the Government and the management of the enterprise. It is true that the manner in which the top management frames its decisions is often such that the distinction gets blurred.

2. The Criteria of Performance

The range of responsibilities or obligations with reference to which the performance of the management has to be evaluated, are likely to flow a good deal from the explicitly or implicitly laid objectives which the enterprise is expected to serve. These objectives may cover various facets of the operation of the enterprise, e.g., earning of surpluses, distribution of the output of the enterprise and generation of non-vendible benefits. In a way, these objectives may be regarded as constraints on the ambit of managerial discretion, for the management has to ensure that the policies adopted by it conform to these objectives. In fact, an important difference between the private and public enterprise emanates from this very fact that whereas in the case of the former, the focus of the objectives (immediate or ultimate) of the enterprise is generally on profit maximisation, in the case of the latter these objectives may be multiple and diversified.

The implication of the above in the present context is that the criteria for the appraisal of managerial efficiency in the case of public enterprises would have to be related to the complex of objectives. Since these objectives are not likely to be alike in the case of all enterprises, it would not be possible to lay down a uniform set of criteria which is applicable to all enterprises. Yet giving due cognisance to

the legitimate rights of the investor (i.e., the Government) to determine the objectives that the public enterprises must fulfil, and the inherent characteristics of the enterprise as a business undertaking, it should be possible to lay down a general scheme of priorities in regard to these criteria. It is important to lay down priorities because the obligations of the management in different directions may not all be consistent with each other, and to the extent that there is inconsistency between them, a judgment would have to be made on the relative importance of these objectives.

Broadly, the performance of the management of a public enterprise may be judged on the basis of the success achieved by it in four directions, in the priority indicated below:

(1) realisation of the non-financial objectives of the enterprise as specified by the Government;

(2) maximisation of the profits within the constraints of Government's directives in regard to non-financial as well financial matters;

(3) improvement in the quality of products;

(4) economy in the use of resources i.e. inputs.

The justification for putting the profitability in the second place of priorities lies in the primacy of non-official financial objectives in the establishment of public undertakings. This is more marked in the case of public utilities and transport.

It is true that the public enterprise being a business undertaking must be run on commercial lines, but quite often the basic raison d'etre behind the establishment of the enterprise is something other than earning of profits. These objectives may well be such as to come into conflict with the financial objectives emanating from the commercial principles of operation and to the extent to which this is so, the commercial objectives must necessarily be subordinated to the non-commercial objectives.

Maintenance of quality of products is an important dimension in which the responsibility of the management extends. To a certain extent there may be a case for giving it a higher priority than what is indicated above. In the case of many enterprises, the nature of the product may be such as to justify giving a high priority to this aspect of managerial responsibility. But, by and large, it would be reasonable to assume that maintenance of quality and realisation of profits are linked with each other, in the sense that the success achieved by the management in maximising its profits would depend a good deal on its ability to maintain and improve the quality of the products of the enterprise. As such the performance of the management on the commercial front is likely to provide an implicit measure of its performance in respect of maintenance of quality of products.

On the other hand, giving a higher priority to quality criterion may well amount to undermining the commercial criterion. By its very definition, a public enterprise is a commercial undertaking and as such maintenance and pursuit of commercial objectives has to be an important obligation of the management, within, of course, the constraints imposed by the wishes of the investor. Since there is ~~a~~ the possibility of a conflict between the quality and the profit criteria, in the sense that after a certain point improvement in quality might impinge upon the profit objective, it is necessary to give a higher place to the profit criterion than the quality criterion in the referent scheme of priorities.

The criterion of economy emphasizes the obligation of the management to make continuous endeavours towards reducing the cost of production. To a certain extent it is related to, and is a part of the profit criterion, in the sense that the success of the management in augmenting the surpluses of the enterprise would, to a significant extent, depend upon its ability to reduce the cost of production. But cost reduction is only one of the ways, though a very important one, of improving profitability. Better planning of sales, manipulation of tariffs and exploitation of new markets are some of the other methods by which the surpluses generated by the enterprise may be improved, (without taking resort to monopolistic exploitation). Further, a blind attempt

at cost reduction may well come into conflict with both the non-financial and financial objectives. In view of these, it would obviously be improper to assign primacy to cost reduction criterion over the surplus criterion in laying down the priorities among them.

The basic idea behind the above scheme of priorities is that the performance of the management of public enterprises should be evaluated with reference to the ambit of discretion of the management in policy formulation, on the one hand, and the explicit constraints on the commercial objectives of the enterprise, as determined by the Government, on the other. The usual commercial criteria for judging managerial performance in business undertakings need to be modified in the case of public enterprises, in the light of the non-financial objectives determined by the Government. In the absence of such non-financial objectives which come into conflict with the commercial objectives of enterprise in terms of earning of surpluses, the performance of the management should be judged primarily on the basis of its success in earning surpluses.

The performance of the enterprise on each of the above criteria taken individually would provide a picture of what the management has been able to do in different directions. The picture so emerging would be in a way piecemeal and diffused in character insofar as it would not by itself, provide

an overall picture of the management's performance. Assessment of overall performance will necessitate some further processing of the data in regard to the management's performance in different directions taken individually.

The performance of the enterprise on each of the criteria mentioned above would broadly consist of two parts: (1) those which are related to the performance on other criteria either as a cause or as an effect, and (2) those which do not have any such inter-relationship, and are therefore "independent". To the extent that the performance on different criteria are inter-related, it would be necessary to devise a method for making a judgment on the implications of any given category of inter-related performance on different criteria from the viewpoint of overall performance. With reference to any such category, the performance on only one criterion should be taken into account for the purpose, otherwise there will be an obvious danger of being trapped into double-counting. The criterion, the performance on which is to be taken into account in such cases, should be decided in the light of the structure of priorities indicated above. The nature of performance on the criterion having the hightest priority in the interrelated category might be taken as an indicator of the overall performance of the enterprise, insofar as the particular category in question is concerned.

An exercise on the above lines will resolve a substantial part of the ambiguities arising from the multiplicity of criteria in the process of evaluation of overall performance of the management. Yet, even after this process of rationalisation, the performance of the management on the different criteria are not likely to get reduced to that on one single criterion so as to give an unambiguous indication of the overall performance of the enterprise. The possibility of part of the performance on some criteria being independent of the performance on other criteria cannot be ruled out. An assessment of the overall performance of the management, will, therefore, necessitate some process of "averaging" of the performance on each of the different criteria. In case the performance on all these criteria is in the same direction, it would, of course, be possible to discern a general trend without any kind of averaging, but more precise and quantified results ~~is~~ are not likely to be obtained without a process of averaging.

The weights to be attached to the different criteria for this kind of averaging would obviously have to be determined in the light of several factors including social and political forces, a discussion of which is beyond the scope of this paper.

While apparently, the approach outlined above is fairly logical and convincing, in operational terms, it may not be

easy to proceed along these lines. Often the management of the public enterprises actually operates under a complex of constraints conflicting with its commercial obligations without there being explicit directives from the investors i.e. the government to that effect. The intentions and wishes of the government may enter into the decisions of the management of the enterprise surreptitously, without any explicit directive or record thereof.* Although technically identifiable, in actual practice, the dividing line between the government and the public enterprise in respect of policy formulation tend to get blurred and indistinguishable. Policies actually originating at the government's level (i.e., the ministry concerned) may formally get expressed through a decision of the control board or the chief executive of the enterprise.

So long as such surreptitiously indicated government's directives and the policies resulting therefrom at the enterprise level do not come into conflict with the commercial obligations of the management, there is nothing to worry about.

* Thus the government representatives on the control board of the enterprise may act as the carriers of the government's view and thereby mould the decisions of the board to suit the government's policies. Instances are not uncommon when the government's representatives on the control boards of public enterprises display a kind of dual loyally and act more as representatives of government than as a member of the control board of the enterprise concerned.

If, however, there is a conflict, the management will be not only actually working under constraints, but technically taking the full responsibility for a departure from the commercial principles of operation, even though as a matter of fact the responsibility for these constraints would lie on the government. Technically, these constraints would be non-existent and the management would be fully accountable for the entire structure and content of its policies. In this circumstance, appraisal of managerial performance on the basis of the above criteria might turn out to be unfair to the management, for, in the absence of externally given constraints the performance of the management would be judged on the basis of its achievement in furthering the commercial objectives of the enterprise. Thus apparantly a strict application of the above criteria might well give a distorted picture of the performance of the management of the enterprise. The question is, does this fact of a certain degree of fusion of decision-making process at the government level and at the level of the enterprise invalidate the scheme of priorities in the criteria suggested above for the evaluation of management's performance?.

If, however, we examine the question a little deeply, the answer would turn out to be in the negative. Logically, the assumption of responsibility for a decision should be inevitably associated with accountability for that decision, and the

decision in question would not be excluded from the scope of evaluation. If the management has accepted or identified itself with a certain policy decision originating from the government, the responsibility for that decision must be borne by it and the validity or otherwise of that decision should be taken into account in evaluating its performance. Thus, the diffusion in the origins of managerial decisions need not distort the structure and content of responsibilities with reference to which the performance of the management is to be judged. The implication of this reasoning is that the application of the structure of criteria for the appraisal of management's performance, would not in any way be unfair to the management.

3. The Problem of Appraisal

The criteria suggested for the appraisal of management's performance indicate the end results of the managerial function with reference to which the performance of the management is to be evaluated. Thereby, they provide a focus on the activities of the management on the basis of which the quality of the management's role in the enterprise has to be evaluated. Evaluation, however, involves a process of examination and scrutiny with reference to certain data regarding alternative possibilities. In the context of the performance of the management, data on the alternative possibilities may be

obtained in the main, from three sources: (1) the management's own performance in the past, (2) the performance of the management of other comparable organisations and (3) some hypothetical standards of performance.

In case the basis for making the appraisal is (1) or (2) above, the findings are likely to be entirely comparative in nature. In the first case the findings would throw light on the change in management's performance over time, in terms of improvement, deterioration or maintenance of stability. In the second case, the findings would reveal the comparative performance of the management in different enterprises. In the third case, possibly, the findings may be such as to provide an answer to the question whether and to what extent the management of the enterprise is efficient. Often the evaluation in the comparative sense, as indicated above may be the only feasible way of judging the performance of the management. But to a limited extent, it may be possible to work out a method for evaluating management's performance with reference to historically or technically known standards of perfection and thereby work out the quality of performance in absolute terms. With reference to any particular case, it may be useful to examine the usefulness and feasibility of approaching the problem in all the three ways, for each of these approaches may provide useful guidelines for making improvements, which, needless to say, is the objective of evaluation of

any kind.

Appraisal of the management's performance thus turns out to be an exercise in making a comparative evaluation, in the sense that the findings of an effort in this direction would depend upon the dimension of comparison chosen for the purpose. Thus, the management's performance in any year may appear to be quite good as compared to what it did in a previous year and quite bad as compared to what the management of a similar undertaking placed in similar circumstances is able to do. Generally, the possibilities in respect of making meaningful comparisons are likely to be too limited to allow for anything more than an assessment of change in performance over time.

Whatever be the dimension in which comparisons are sought to be made for the purpose, a good deal of caution would have to be observed in order to ensure that the comparisons made are meaningful and provide a sound basis for making a judgment. The danger of falling into the pitfalls of error and bias in this context may arise from two factors. Firstly, the end results of the management's performance providing the criteria, in respect of which comparisons are to be made, may turn out to be conflicting with each other. Secondly, what are apparantly comparable quantities may not as a matter of fact be comparable on account of incomparable environmental conditions.

As pointed out in section 2 above, the performance, of the management in public enterprises has to be evaluated with reference to the achievement of the management in a number of directions. As such, there has to be a structure of criteria for the purpose. Since these criteria may be conflicting with each other, priorities have to be determined. By implication, an improvement in the performance of the management as reflected on one criterion may be inevitably associated with a deterioration in the same as reflected on another criterion. And there lies the danger of drawing wrong conclusions from comparisons of facts as they are, for, while the management may appear to have been successful on one front, it may appear to have failed on another, although the latter may, as a matter of fact, be a consequence of the former.

The environmental conditions governing the performance of the management may relate to matters of policy as well as the physical and financial parameters under which the productive activity is organised. Any difference in these conditions would obviously have an impact on the ability and the capacity of the management to discharge its functions and may thereby influence the end results, which would thereby incorporate the effects of some such factors which are beyond the control of the management. Evaluation of the performance of the management might thereby turn out to be somewhat erroneous and misleading.

Thus, in making the comparisons, the data in respect of the indicators constituting the criteria would have to be properly analysed in order to separate (1) the effects of management's achievements in one field on the same in other fields and (2) the effects of differences in the overall constraints under which the management functions on the end-results reflecting the management's performance. Given the priorities, analysis of data on these lines would provide a basis for making a comparative evaluation of the achievements of the management in different fields and would thereby, be of use in the assessment of the overall performance of the management.

4. The Technique of Evaluation

While formulation of a suitable strategy is an important step in tackling any problem, it provides only a guideline for proceeding on the work. In the light of the strategy determined for the purpose, a detailed plan of action has to be prepared and the problems therein examined. The criteria for the evaluation of the management's performance, so to say, provide the strategy for undertaking the task. They indicate the aspects of the end results of the management's performance which have to be taken into account for the purpose in view. They also suggest a certain scheme of priorities among these end results so as to enable and facilitate judgment insofar as there is a conflict between them. They, however, do not

suggest in concrete terms the items and the quantities which have to be studied and analysed for the purpose. The strategy, suggested by these criteria would have to be given a greater operational content in order to make it useful and applicable in specific cases. This would, in the first place, necessitate defining the end results constituting each of these criteria in greater detail. Secondly, it would require an elaboration of the techniques of comparisons implicit in the process of evaluation.

The main variables showing management's performance by the first criterion i.e., the extent of success achieved in realising the objectives of the enterprise - are likely to be the volume of output provided, the distribution of the product-mix and the investment of capital. Usually, these comprise the major end-results of the operation of the enterprise regarding which the government (i.e., the investor here) gives explicit instructions to the management of the enterprise.*

The main variable reflecting the management's performance on the second criterion - the success achieved in maximising profits - is the rate of return on capital. The justification

* These instructions may be conveyed in many ways. They may be conveyed directly to the enterprise by way of directives. Or, they may be adopted as part of the plan objectives which in turn become the guidelines for the operation of the enterprise. A more subtle method may be through control over the budgets of the enterprise.

for relating profits to capital invested for the purpose in question lies in the fact that (1) capital is the most scarce factor of production and (2) there may be a direct functional relationship between the capital invested and the profits earned. The criterion in fact emphasizes profitability rather than profits as such.

The rate of return, however, is a ratio, showing the relationship between the net profits of the enterprise and the capital invested. It is a function of three other secondary variables viz., aggregate revenue, aggregate cost and the aggregate capital invested, which may be significantly independent of each other. As such, each of these secondary variables would have to be studied separately with a view to analyse the management's performance in respect of profitability.

The variables indicating quality of output are likely to differ a good deal from one enterprise to another, depending upon the nature of the output produced by the enterprise. At this place it is not possible to give anything more than a bare reference to what they might be. Thus, in the case of servicing enterprises (like electricity and transport undertakings), the punctuality and the regularity with which the services are provided may provide useful indicators of the quality of service rendered. In the case of manufacturing enterprises the main indicators of quality of output may be

given by the degree of acceptability of the products of the enterprise by the consumers thereof. To a certain extent, an objective assessment of the quality of a commodity or service (or differences therein) is likely to be rather difficult, and judgment on this question would have to be based on what the consumers of the product in question feel about it. Indexes showing the direction and intensity of consumers' evaluation of the quality of the output of the enterprise may provide a supplementary set of variables with reference to this criterion. Broadly, the characteristics of the industry to which the enterprise belongs and the market situation governing the operation of the enterprise would determine the content and nature of the variables belonging to this category.

The variables showing the performance of the management in ensuring economy in resource use would have to be constructed in terms of ratios, as in the case of the second i.e., the profitability criterion. These ratios would indicate the usage of each broad category of input per unit of output. Thus, the main indicators with reference to this criterion might be output per unit of labour, output per unit of capital invested, output per unit of fuel consumed etc. The choice in regard to the inputs with which output is compared would be guided by the relative scarcity of the inputs in question, on the one hand, and the capacity of the input in question to represent the usage of productive resources in general on the other.

The quantities which are sought to be related to each other by these variables may be expressed in terms of physical as well as financial units. Mostly, the quantities, relevant in the present context, are capable of being expressed in homogeneous physical units. Yet there may be some which do not have this attribute. In the latter case they would have to be converted into the homogeneous units of some other quantity which is fit to serve as a common denominator of the non-homogenous units of the quantity in question. Usually, money serves the purpose of such a common denominator. Labour is one of the agents of production which is fairly homogenous in character. But capital is not; and therefore has to be expressed in terms of money. Output may or may not be divisible into homogenous units, depending upon the characteristics of the industry to which the enterprise belongs. As such output may be expressed in physical terms in case of some enterprises and in financial terms in the case of some others.

The implication of the above in the present context is that some of the variables falling into this class may be expressed in physical units and some in financial units. Generally, productivity of labour can be expressed in both physical and financial units. The same is true of productivity of capital i.e., output per unit of capital, but usually it has to be expressed in financial units because of the

difficulties in expressing capital in physical units. The necessity of expressing these indicators in terms of money is of some significance in the present context. The difficulty with money values is that direct comparisons between them may turn out to be somewhat misleading, on account of differences in the value of money itself. As such the variables expressed in financial terms may have to be processed in certain ways in order to make them useful for making comparisons.

There is one further point to be noted in this connection. The variables showing the management's success in effecting economy in the use of each agent of production separately may not necessarily provide a basis for a conclusive judgment on the overall performance of the management in this regard, taking all the agents of production together. Of course, if the results shown by each of these variables are identical in terms of direction, it may be possible to arrive at a broad conclusion on the question. But in case the trends shown by these indicators are not all in the same direction, it would be logically impossible to arrive at a general conclusion on the performance of the management in this regard, unless a method of averaging the results shown by each of these variables is evolved.

There are two ways in which this can be done. The first is by converting the different variables into a common unit of measurement which would obviously be money. The second is

by constructing a system of weights which can be applied for averaging the pure quantities indicating the success of the management in effecting economy in the use of each agent of production. The use of the former method may ultimately reduce the criterion to that of money cost per unit of output. As for the second, comparative money costs would provide the only rational basis for constructing these weights, the application of which would inevitably take away the very essence of this criterion.

Usually, however, it would be possible to draw meaningful conclusions on the question referred to by this criterion on the basis of the variables relating to the individual agents of production. For, generally, the relevant comparisons, whatever be their dimension, are not likely to lead to such results which would make an attempt at the application of this criterion infructuous. Thus, in the context of comparisons over time, it is unlikely that the output-capital ratio and the output-labour ratio would turn out to be moving in different directions. Especially, if the period over which the comparisons are being made is short, the results in respect of changes in the variables, taken individually, are likely to be such as to indicate an identifiable trend in the usage of all the major inputs. Those of the variables which are not changing in step with the others are likely to remain stationary

rather than move in a different direction. In case comparisons are being made between two undertakings, it is unlikely that they would be so very much different in respect of the technique of production, that the variables would show totally incongruous results. And if they really give such results, it would simply mean that the managements of the two enterprises in question are operating under basically different conditions as a result of which meaningful comparisons between their performance cannot be made.

The variables relevant to the different criteria would provide the bases for making the relevant comparisons for judging the performance of the management. But, as indicated above, these comparisons may turn out to be misleading. In order to guard against this danger, it would be necessary to process the data on these variables in a certain way and make necessary adjustments to ensure comparability for the purpose in view.

Broadly, the necessity for making such adjustments can be attributed to three factors. Firstly the nature of constraints on the management's discretion in the situations in which management's performance is being compared, may not be alike. Thus in the context of time series comparisons, the basic policies regarding production and distribution of output may not be alike in the periods in which the management's

performance is being compared. The same sort of condition may be obtaining in the context of comparisons between the management's performance in different enterprises. The basic policies which the managements of the enterprises in question are expected to follow may be substantially different.

The differences of this nature may well account for a part of the differences in the values of the different variables relating to the various criteria for judging the management's performance. Thus if in period 1, the enterprise is expected to sell a part of its output at a price which is less than cost, and in period 2, there is no such obligation on the enterprise, the profits earned by the enterprise in period 1, may well fall short of that in period 2, for no lapse on the part of the management. Similarly, of two enterprises operating in the same industry, one may be required to produce a category of goods which it is uneconomical to produce, while there is no such obligation on the other. Obviously, comparison of the management's performance in these two enterprises on the criterion of profitability may put the management of the first in a somewhat disadvantageous position.

In the interest of meaningful comparisons for the purpose, therefore, the nature and extent of the effects of the differences in the basic objectives of the enterprise on the values of the variables refering to the other criteria would have to

be estimated. Obviously a substantial difference in these objectives may well account for a significant difference in the rate of return on capital, the quality of the product as well as the usage of inputs per unit of output. The analysis would therefore be intended to separate the observed differences in the values of the variables concerned into two parts: one that is accounted for by the differences in the focus of the endeavour of the management, for which the management should not be held responsible explicitly, and the other that can be attributed to the difference in the ability of the management to husband the resources at its disposal.

Secondly, adjustments in the values of the variables in question may be necessitated by differences in the environmental conditions governing the situations under which the management's performance is being compared. These objective conditions may comprise such factors as the prices of inputs and outputs, technical co-efficients of production and the complex of restrictions put on the management by the government on matters relating to the organisation of productive activity. Here again the purpose of the analysis would be the same as in the previous case viz., to separate the observed differences in the variables in question into two parts: (1) that attributable to factors within the control of management and (2) that accounted for by factors beyond the control of the management.

Lastly, it may be necessary to make some adjustments in the values of the variables for assessing the implications of the interactions between the different criteria. As pointed out above a superior performance of the management on one criterion may implicate an inferior performance on another criterion. Obviously, therefore, in all such cases the values of the variables relating to each criterion would have to be analysed in order to assess the extent to which the difference in their values is accounted for by the difference in the performance of the management on all other criteria which find a higher place in the priority list of the criteria for the purpose. Otherwise, a superior performance of the management on one criterion may well prejudice its evaluation on another criterion.

5. Appraisal for Corrective Measures

The analysis of the values of the variables would indicate the performance of the management on different fronts. The purpose of appraisal, however, is not merely to make an assessment of what the management has done or is doing, but also to suggest guidelines for improving the same. The variables relating to the different criteria would have to be subjected to some further processing if the factors responsible for the differences in the management's performance are to be investigated.

A full-fledged endeavour in this direction would inevitably necessitate a detailed break-down of all the relevant variables into a number of secondary variables showing the extent to which the observed differences between the values of these variables in comparable situations can be attributed to the different factors. This kind of detailed breakdown would have to be made for each enterprise individually, keeping in view the complex of the inputs and outputs of the enterprise in question. It would, therefore, be difficult to make any generalisation in this regard; yet an attempt can be made in this direction.

Logically, an analysis of the contribution of different factors to the observed difference in the realised rate of return on capital should explain the differences in the performance of the management on each of the four criteria. Taking the example of time series comparisons, a change in the input-output ratios or a change in the quality of the product over time are likely to have an effect on some of the secondary variables determining the rate of return on capital. Similarly the variable showing changes, if any in the basic policy matters relating to the content and distribution of output are also likely to have an impact on some variable or other determining the rate of return on capital. Thus, detailed analysis of a change in the rate of return over time showing

the contribution of different factors to the same may well go a long way towards indicating the performance of the management on each criterion.

The first step towards this kind of analysis of the rate of return on capital would be to explore the main factors which bear on each of the secondary variables determining the rate of return on capital. The size of aggregate revenue of an enterprise during any period would depend upon three factors viz., (a) the size of output, (b) the proportion of output which is actually sold during the period and (c) the price per unit of output. The size of output in turn would depend upon two factors viz., the extent of utilisation of the capital invested in the enterprise and the size of investment itself. Aggregate cost may be divided into two parts viz., (1) running cost and (2) overheads. The former would depend upon four factors viz., (1) the size of capital invested (2) the running cost per unit of output produced (3) the intensity of utilisation of capital, and (4) the price of inputs. Further, the capital invested itself may be divided into two parts (1) fixed capital and (2) working capital. Comparisons between ratios representing the relationships between some of these factors may well provide a useful basis for discerning the reasons for the observed difference in the rate of return in the situations being studied. For instance, the relevant ratios for the

purpose on the revenue side may be output/capital (in physical and financial units), output/fixed capital, output/working capital, revenue/output, and output sold/output produced. With reference to cost the relevant ratios may be overhead cost/capital invested, overhead cost/fixed capital, overhead cost/working capital, running cost/capital invested, and running cost (financial units)/running cost (physical units). In respect of capital, some of the useful ratios may be interest cost/capital invested, depreciation cost/capital invested, and fixed capital/working capital.

While providing useful bases for analysis, the ratios by themselves would not give an exact explanation of the ~~casual~~ causal relationships. That is true of every statistical analysis. A statistical analysis has to be supported by logical reasoning in order to enable it to give dependable and precise explanation of the phenomenon being studied.

6. Some Administrative Implications

There are two aspects of the task of appraisal of the management's performance, one is positive and the other is prescriptive. The positive aspect is concerned with fact finding and assessment. Efforts in this direction should cover both these dimensions of the problems.

Further, the task should be undertaken at the level of the enterprise as well as by an agency outside the enterprise.

Appraisal at the level of the enterprise would be intended to keep the management continuously informed about the quality of its performance. Appraisal by the external agency would serve the dual purpose of providing the management with an objective assessment of its working and ensuring the accountability of the enterprise to the parliament and the public.

Many
~~Most~~ public enterprises do have some kind of statistical units, but their work is largely confined to preparation of Annual Reports, which seldom give anything more than a summary of audited accounts. In larger enterprises, the statistical units are entrusted with the task of feeding the management with statistical material on performance, but the purpose behind this is to collect information on the performance of subordinate levels in the managerial structure. The internal audit departments, in the few enterprises in which they exist at present, are not even remotely concerned with a task of this nature. Their main preoccupation is to help the management in observing the juridical propriety in making financial sanctions.

The absence of an adequate organisational machinery for undertaking the task within the enterprises may be partly attributed to the sheer inability of the enterprises to do so. The reasons for this may, in turn, be the lack of trained staff and lack of management consultancy services. In order to fill up the lacunae in these respects, it might be useful

to set up an adequately equipped management cell in the Bureau of Public Enterprises, which would provide necessary services to the enterprises including that of training of manpower.

The setting up of proper internal organisation may, however, well take some time. In the absence of it, it is unlikely that the public enterprises would be able to undertake an appraisal following the rather sophisticated method suggested above. In the meanwhile, the enterprises may well work out simpler methods comprised of some relevant ratios of the main variables to assess their performance. As a matter of fact, in the present circumstances, they may well have to adopt a phased programme incorporating a gradual introduction of a system of appraisal of performance as suggested above.

agencies

As regards appraisal by an external agency, the main organisations directly concerned with this task at present are the Parliamentary Committee on Public Undertakings, the Bureau of Public Enterprises and the Comptroller and Auditor-General of India. The type of focus that would be needed for making an assessment on the lines suggested above is entirely absent in the approaches of the existing agencies undertaking the task of evaluation of the working of public enterprises. The examination of the working of public enterprises by the Parliamentary Committee on Public Undertakings is largely concerned with matters of detail, which while undoubtedly having a

bearing on the overall quality of the management's performance, do not present an overall picture of the same. The work of the Bureau is largely descriptive. In its report it does give some kind of analysis of the financial and working results of these enterprises, but it is difficult to discern an inherent purpose behind it. The C&AG's report again suffers from the same defect as the report of the Parliamentary Committee on Public Undertakings. It concentrates on minor points.

It might perhaps be possible to entrust any one of the existing agencies with the task of making an appraisal on the lines suggested above. The Parliamentary Committee on Public Undertakings is undoubtedly the most powerful and the most respected organisation available for the purpose. But it suffers from one great handicap insofar as its suitability for undertaking a task of the type in question is concerned. As a matter of convention, it does not take expert assistance in discharging its functions, which may limit its capacity for a sophisticated type of analysis. Further, the Committee is usually not in the habit of making a distinction between the government and the management of the enterprise, which is the very basis of the methodology proposed here. The Comptroller and Auditor General could be a competent agency, but it is doubtful whether it would be desirable to dilute its present auditing functions with the function of appraisal of performance

in general, which obviously involves a different type of approach and analysis. Besides, a common difficulty with both these organisations is that it would be difficult for them to cover the large and increasing number of enterprises in the public sector in India.

The Bureau of Public Enterprises is a small organisation at present, but it has an immense potentiality of developing into a servicing agency for public enterprises. With an expansion of the facilities at its disposal, it may be possible for it to undertake a task of the type and order envisaged here. Three points may be advanced in favour of entrusting this task to the Bureau. Firstly, the Bureau being a part of the Government can evaluate as well as advise the public enterprises on such organisational matters as setting up an internal organisation for appraisal. Secondly, it can obtain the necessary expert assistance and advice for the purpose. Thirdly, it can undertake the task on a fairly substantial scale.

Whatever be the external agencies concerned with this task, it would be necessary to organise them on such lines which enables them to avail the best of expertise available for the purpose. To this end, they should have both part-time and full-time staff drawn from various professions e.g., administration, engineering, business and also the academic

profession. Similarly the internal units within the enterprise should be staffed with specialists of a fairly senior level belonging to these professions. Here again, in order to attract the best of talent, provision may be made for both full-time and part-time members.

Price Policy of Public Undertakings

1. Some Basic Considerations

The main objectives that the pricing policy of public enterprises should serve are mainly three: first, it should help a rational allocation of scarce resources, secondly, it should ensure an optimal utilization of the available resources; and lastly it should promote the growth of the economy. The Government of India had been particularly emphasizing the last of the above objectives of pricing.

The question of pricing of the products of public enterprises is inevitably linked up with the market situation in which they are operating. The main types of market situations in which public enterprises may be operating are as follows:

(a) Competitive Markets. The enterprises operating under competitive conditions may be further classified into three broad sub-categories: (1) those which have to compete with suppliers within the country; (2) those which are exporting their products, and are thereby competing in foreign markets; and (3) enterprises facing competition from imports.

(b) Monopoly Situations. The enterprises falling in this category include the statutory monopolies as

well as monopolies by reason of temporary absence of other producers in the industry.

(c) Oligopolistic Situations. (Characterised by a small number of sellers). Such market situations may be further sub-divided into two categories according to whether other enterprises in the industry belong to the public sector or the private sector.

(d) Markets characterised by limited number of buyers or one buyer only.

Under competitive conditions, the prices which the products of public enterprises would be able to fetch in the market would tend to ensure both a rational allocation and an optimal utilisation of scarce resources. The profit earned by the enterprise under competition tends to show the marginal productivity of capital invested in the enterprise[1] and thereby provides a guideline for further investments. Further, a policy of maximisation of profits under these conditions would ensure an optimal utilisation of the existing capacity in the sense that the pursual of such a policy would result in maximisation of aggregate benefit[2] from the productive activity of the enterprise. Further

1. In the present context, the marginal productivity of capital is taken to be indicated by the profit earned by the enterprise at optimum output.

2. Aggregate benefit in the present context implies the total utility generated by the enterprise which, in turn, would be given by the aggregate area under the relevant part of the average revenue curve of the enterprise.

it would, ipso facto, ensure the maximal utilisation of the growth potential of the enterprise in terms of earning of surpluses.

In the case of enterprises having a significant monopoly power, it is difficult to define the guidelines to pricing in such precise terms. For, under these conditions, there may be occasions for a conflict between the different objectives as outlined above. Thus, a price policy intended to ensure maximisation of the aggregate benefit generated by the productive activity of the enterprise, may not be the same as the policy aimed at showing the marginal productivity of capital invested in the enterprise. Aggregate benefit would be maximised by producing an output at which marginal cost is equal to price, while the marginal productivity of capital would be shown by the profitability of investment at the optimal level of output. Further, the policy intended to maximise the surpluses earned by the enterprise may be entirely different from either of the two above.

A detailed theoretical analysis of the question of pricing in monopoly type public enterprises would show that policy making in this respect is basically one of laying down priorities regarding the various objectives which the

referent policies are intended to serve.[1] From a logical viewpoint, the following order of priorities may be suggested:

(1) The enterprise should not run into losses. This is of particular significance in those cases in which the enterprise suffers from excess capacity.

(2) The enterprise should try to maximise the benefits arising from its productive activity. This is of special importance for public utilities.

(3) The enterprise should maximise its surpluses, without resorting to output restriction.

As a matter of fact there need not be an inevitable conflict between the last two objectives. The objective (2) implies extending the output of the enterprise to a level at which marginal cost is equivalent to price. The objective (3) implies extending the output beyond the optimal point in such measure as to maximise the surplus earned by the enterprise. In many cases it should be possible for the

1. In the ultimate analysis the question of pricing policy veers round certain value judgments about the objectives which the public enterprises are expected to further in the economy. The basic assumption underlying the analysis in this paper is that one of the most important objectives of pricing policy of public enterprises in India is generation of surpluses for developmental purposes. The justification for making this assumption lies in the policy declarations made by the Planning Commission on this question.

enterprise to maximise its surpluses while producing the output indicated by objective (2). Insofar as there is a conflict between the two, a suitable compromise may be effected keeping in view the overall objectives regarding mobilisation of surpluses.

Excepting the conditions of excess capacity the crucial issue in determining the price policy of this category of enterprises, therefore, would turn out to be one of choosing a level of output between two limits: the capacity or the optimal output on the one hand, and the level of output at which marginal cost is equal to price, on the other. In case the enterprise is suffering from excess capacity, the compulsion of satisfying the minimal commercial criterion of covering costs with revenues might necessitate restriction of output below the optimal level.

In between the two extremes of the competitive and monopoly situations, there may be other market situations characterised by varying degrees of the competitive and monopoly elements. One such situation may be that of oligopoly in which there are a few sellers competing with each other so that the price policy of each individual unit has a bearing on that of others. Another may be one in which the enterprise may be confronted with a small number of buyers or one buyer only. Yet another possibility

is that of monopolistic competition in which there are a large number of buyers and sellers, the latter differentiating their products by such means as advertising and branding.

In the case of oligopoly and monopolistic competition, the public enterprise need not follow a different policy than what it should have done if it were a monopoly which means that it need not follow a policy of output restriction simply to augment its surpluses. The market situation of restricted number of buyers may result in higgling and bargaining between the enterprise and its buyers which, in turn, would tend to make it difficult to generalise about the overall consequences of a price policy.

Under competitive or semi-competitive (like oligopolistic or monopolistic) conditions, the enterprises having lower costs would be able to make larger profits than others. This might be considered undesirable for strategic reasons particularly if the enterprises having a comparatively advantageous position are in the private sector. Further, under conditions of overall scarcity the pattern of distribution of the product emerging from the free interplay of the market forces may not be regarded as being in national interest. In such ~~cases~~ situations, there may be a case for controlling the prices as well as the distribution of the product in question. In the event of such control being exercised,

the price policy of the enterprise would not be determined independently; it would be a part of the overall price policy for the industry as a whole. Under such "administered" system of prices, the position of the enterprise will be the same as under perfect competition and, as a corollary, following the priorities discussed above, the level of output which the enterprise should aim at producing under these conditions would be that at which the marginal cost is equal to price.

2. The Existing Position

The market situations in which public enterprises are working in India at present are various. Quite a number of enterprises are operating in fairly competitive markets, competition being either from indigenous producers or from imported products or from both. For instance the Hotels Corporation of India, and the Hindustan Salts, compete with private indigenous concerns; the Air India, the Hindustan Machine Tools and the Indian Oil Corporation have foreign competitors and the Bharat Electronics, the Moghul Lines etc. are in competition with both. At the other end, there are numerous cases of enterprises operating under monopoly conditions. The electricity and transport undertakings, the Indian Airlines Corporation and the railways are statutory monopolies while a few

undertakings like the Heavy Electricals, the Bharat Heavy Electricals, the Hindustan Antibiotics and the Hindustan Shipyard are monopolies by reason of absence of competing indigenous producers in the same industry and lack of imports of the commodities in question from abroad. The Hindustan Steel, the Fertilizer Corporation of India, and the National Coal Development Corporation may be regarded as enterprises operating within an oligopolistic framework of market. Examples of enterprises operating in monopolistic markets may be provided by the Ashoka Hotels, and the Air India International. A few enterprises like the National Mineral Development Corporation, the Indian Telephone Industries and the Hindustan Teleprinters have to deal with a small number of buyers as a consequence of which the market condition in which they are operating approximate to that of higgling and bargaining.

There is considerable evidence to show that the price policies of the public enterprises are significantly conditioned by the market situation in which they are operating. Most enterprises operating in competitive markets fix their prices in line with the ruling prices of the commodities in question in the market. In case the competing enterprises are foreign, the landed cost of imported products is generally adopted as the basis for price fixation. In the case of enterprises which are monopolies or possess a very significant

degree of monopoly power, prices are fixed on the cost plus basis. This implies that the prices of products of these enterprises are fixed in such manner as to bring in a certain margin of surplus over aggregate cost to the enterprise by way of revenue.[1] A few notable examples of enterprises adopting this method for price fixation are the Hindustan Aircraft, Indian Telephone Industries and the Bharat Electronics. Often the surplus objective is determined in relation to the aggregate investment in the enterprise in question. But in some cases like the Hindustan Cables and the Bharat Electronics the aggregate turnover, given by the aggregate cost, forms the basis for the same.

The enterprises operating under oligopolistic framework of market follow more or less the same approach towards pricing as the monopoly type enterprises. Usually, however, such market situations are oligopolistic only in structure; the element of competition inherent in an oligopolistic situation is generally conspicuous by its absence from them.

Often the potential competition between the enterprises operating in such markets is done away with by introducing some system of administered prices. The

1. As a matter of fact, the majority of enterprises in the public sector have adopted this principle of pricing. The important public utility undertakings like electricity and transport corporations fix their tariffs on the cost plus basis.

market situation in the steel and fertilizer industry and to some extent coal could possibly have been oligopolistic but for the Government control over the prices of the products of these industries. The rationale for this may be said to lie in (a) the relative scarcity of the products in question (b) the desire of the Government to prevent the private enterprises in the industry for making what it regards as unreasonable profits (c) the anxiety of the Government to protect the financial interests of enterprises operating at high capital (or even operational) costs, and (d) the anxiety of the Government to ensure the supply of the products of the industry to users at reasonable prices.

Under conditions of monopolistic competition, the public enterprises are guided by more or less the same set of considerations as are the private enterprises inso-far as pricing is concerned. This inevitably implies concern for covering their costs by their earnings as far as possible. As a matter of fact, at present there are very few public enterprises which may be said to be operating under this type of market condition and often wherever conditions are like that, the environment of overall scarcity of their products or services, tends to reduce the

rigour of competition they have to face.[1]

In the few cases of the market condition of higgling and bargaining, the enterprises in question do not seem to have a definite pricing policy. The prices of the products of these enterprises tend to be determined by the relative bargaining strength of the buyers and sellers. It appears that on the whole buyers are able to dictate their terms to these enterprises.[2]

3. Defects in Policies

Broadly speaking pricing in public enterprises operating in competitive markets satisfies the overall objectives of pricing characteristic of commercial undertakings. The force of competition compels them to make continuous endeavours towards reduction of costs and expand their output to the optimal level. The losses incurred by them, if any, under such conditions may well be an index of their inefficiency.[3]

---

1. Thus in many cities, the Government dairy and poultry farms are ostensibly operating in competition with private suppliers of same or identical products. But the total availability of the commodities in question is usually insufficient to meet the total requirement, as a result of which competition between the different producers tends to become notional rather than genuine.
2. The National Mineral Development Corporation has been complaining about its inability to secure suitable prices for its products from the Minerals and Metals ~~and Metals~~ Trading Corporation. Similarly, the Heavy Electricals have the feeling of not receiving proper treatment from some of the Electricity Boards.
3. Thus the losses incurred by such enterprises as Khadi Gramodyog Boards in various States may well be attributed to both operational inefficiency and inefficiency of investment.

The above is not, however, true of the enterprises working in monopoly or oligopolistic situations. A major defect in their pricing policy arises from the emphasis on surpluses rather than the level of output in fixing their prices. The conditions of monopoly and the relative scarcity of products make it possible for them to attain their surplus objectives at less than optimal output.[1] How far these enterprises actually take resort to output restriction, it is difficult to say. But to the extent to which this happens the surpluses earned by the enterprises would not show the marginal productivity of the capital invested in them. Further, this approach towards pricing works against the possible use of the price mechanics for ensuring operational efficiency. It is true that several enterprises are now taking steps towards using sophisticated techniques of cost control and management accounting to this end,[2] yet it can hardly be denied that the price policy can play a significant role in this direction.

Secondly, the policies often suffer from a multiplicity of objectives, and a wrong assessment of the interrelationship between these objectives. An important -

---

1. An illustrative case of earning of surplus along with output restriction is provided by the Bihar Road Transport Corporation. The Corporation was earning surpluses for a number of years (1959-60 to 1961-62 even though its capacity was not utilised to the optimum level. The Fertilizer Corporation of India provides another example.
2. Examples are the Fertilizer Corporation of India, the Hindustan Steel Ltd. and the Chittaranjan Locomotive Factory. The Fertilizer Corporation has been particularly keen in this respect.

and, in the present context, perhaps the most important objective of pricing is the generation of surpluses, but this objective has, in several cases, been modified or ignored in favour of some other objectives without a detailed consideration of the extent of conflict between the two.[1] Possibly, the authorities taking the relevant decisions have been guided more by convention than a detailed study of the issues involved.[2]

Thirdly, in a number of cases, especially public utilities and transport, apparently irrational policies are being followed in the name of public interest.[3] It would be difficult to gainsay that public enterprises should function in public interest and that they should not have the narrow aim of earning profits as private enterprises have. Nevertheless, it should be possible to rationalise its meaning and define its content more precisely than what has been done so far.

---

1. Perhaps the best example of this is provided by the pricing of fertilisers. The Government has for long been keeping the prices of fertilisers low/ in relation to what might have been the equilibrium price possibly with the objective of keeping the commodity within the reach of the users. In a situation of scarcity, this has lead to the emergence of complex problems of distribution, without in any way contributing towards a more effective or rational use of the product in question.
2. A rather remarkable illustration of how conventions bear upon the formulation of important policies is provided by the approach of the [illegible] Commission to the fixation of prices in public sector undertakings. In determining the rate of return on capital permissible to public enterprises, the [illegible] Commission is broadly guided by the profit margins allowed to the comparable cases in the private sector, or the current rate of return on investments in general in the economy, rather than a detailed analysis of the issues involved.
3. Nationalisation of uneconomic routes by the road transport undertakings in the public sector and extension of power lines to unremunerative areas could provide interesting illustrations of this.

Fourthly, there is a remarkable lack of uniformity between the principles on the basis of which the surplus targets of the enterprises are determined. In the light of what has been stated above, the very method of fixing prices on the basis of a predetermined surplus target would appear to be wrong. But if a strategy like that is followed, it would be desirable to have at least a uniform set of principles for the same. The lack of uniformity is reflected both in the bases over which the surplus targets are determined and the principles for determining the margins over the bases. Thus as pointed out above, while generally the capital invested in the enterprise forms the basis for fixing the surplus targets, in certain cases it is the aggregate cost of the enterprise which is adopted as the base for the purpose. Further, the method of estimation of aggregate capital itself is not uniform being "block capital" in some cases and subscribed capital in the case of others.[1] In the case of enterprises operating in an oligopolistic framework of market, lack of uniformity in the bases of pricing is evidenced in a somewhat different dimension. In the case of steel uniform retention prices based on the costs of one enter-

1. The Tarrif Commission has been adopting the capital block for purposes of fixation of prices. The "capital block" in the case of the Sindri Fertilizer Factory was taken as equivalent to (1) the subscribed capital of the Company plus working capital estimated at four month's cost of production. In contrast to this surplus objectives of the Bihar Road Transport Corporation are determined on a capital base represented by the subscribed and paid up capital of the enterprise.

prise and that a private enterprise - TISCO- is paid to all the enterprises. In the case of fertilizers, on the other hand, the price payable to each enterprise is determined inividually on the basis of its realised costs.[1]

As regards enterprises operating in markets of the last categery characteristised by higgling and bargaining pricing of their products lacks any focus whatsoever. And this is quite natural since they cannot plan about their prices with a view to achieving specific ends. This has an effect on their output policies as well which tend to become haphazard as an inevitable consequence of the uncertainty associated with their financial plans.

4. Implementation of Policies

Notwithstanding the above defects there is a certain measure of direction in the pricing policies of the public enterprises insofar as they do generally intend to make surpluses. The implementation of these policies, irrespective of the quality of their content, is, however, seldem satisfactory. This is refflected in the fact that quite often the financial results projected on the basis of certain prices of the products of these enterprises are not realised.[2]

---

1. In fact, one of the major complaints voiced by the representatives of the Hindustan Steel to the Study-Team was that the basis of price fixation in the Iron and Steel Industry is unfavourable and unjust to the public sector.

2. A very good example of this is provided by the Bihar Road Transport Corporation in which the gap between anticipated and realised profits during some recent years has run into upto 10% of the subscribed and paid up capital of the Corporation.

. In the main the failures in achieving the anticipated results in this regard may be ascribed to three factorys: (1) defective planning of prices (2) lack of adequate knowledge of the inter-relationships between the different variables on which the results expected from the prices planned for a given period depend, and (3) lack of timely action to ensure that the anticipated results are realised.

The prices expected to be realised during any accounting period should be realistic in nature in the sense that they should be such as can be realised during the period in question. A realistic projection of prices would naturally necessitate a realistic projection of the different variables on the basis of which prices are determined, on the one hand, and a realistic estimate of the likely demand conditions during the period in question, on the other. The principal end results of prices as reflected in the financial results of the enterprise are a function of a number of variables which in turn may be a function of a number of other secondary variables. Unless the relationship between these variables among themselves, on the one hand, and that between these variables and the overall end results of pricing are precisely known, it would be difficult to guard against the consequences of unexpected changes in these variables on the overall financial results Lastly, in order to take timely corrective action to ensure that the anticipated results are realised, the enterprise

should have a built-in system by which the management at the top level is informed of what is happening and advised in regard to the action that needs to be taken.

The procedure by which the pricing in the public enterprise sector on the cost plus basis is being done at present, is, by and large, as follows. Prices are fixed in advance of the accounting period (usually the financial year) at the time of the preparation of the budget for the year in question. The method adopted for this is more or less like this. The aggregate output of the enterprise during the ensuing period is first estimated. This provides the basis for estimating the aggregate costs during the period in question. In the case of some enterprises e.g., the Chittaranjan Locomotive Factory and the Fertilizer Corporation of India certain standards or norms of usage of inputs are used for arriving at this estimate. Usually, however, historical costs, i.e., costs incurred in the current year or the previous year are used for arriving at the estimates in question. A margin of surplus estimated as a percentage of the capital invested or aggregate turnover is then added to the aggfogate costs thus arrived at for getting the total amount to be collected by way of revenue. This divided by the aggregate expected output gives the price per unit of output.

There are few enterprises in the case of which adequate care is being taken to ensure that the relevant aggregates for projecting the prices are realistic. In the case of the Fertilizer Corporation of India, the prices of which have for a long time been determined in consultation with the Tariff Commission, some measure of sophistication is observed in this regard. The approach of the Tariff Commission is fairly meticulous and it takes into consideration both the historical records of performance and the special factors that might have a bearing on these aggregates during the price-period i.e., the period for which prices are fixed.

But generally the public enterprises use rather crude methods in estimating these variables. Mostly the past results in regard to performance are projected into the future with broad modifications to incorporate the effects of changes in capacity. For example, a rather common variable whose effect on these aggregates is ignored is the price level. Changes in the price level inevitably have a significant bearing on the level of cost and thereby the realised level of surpluses.[1]

1. To take an example, the costs of the Bihar Road Transport Corporation has been almost continuously increasing since 1962. But it did not make any provision for it in budgeting its costs and revenues, with the result that its realised surpluses are falling short of the expected surpluses almost continuously since 1962-63.

As regards the second point, the study of the inter-relationships between the different variables bearing on the end-results of pricing - i.e., surpluses, - it appears that the public enterprises have not so far given sufficient attention to this aspect of pricing. It is true that many public enterprises do possess a statistical unit with them to collect facts about their operational performance.[1] Similarly records regarding finances and costs are also maintained. But how far they are used for the purpose in question is difficult to say. To take a few concrete cases, the statistical unit of the Bihar State Electricity Board, does collect a lot of information about the operations of the enterprise. But the information so collected is seldom used by them to explore why the enterprise has been incurring "unplanned" losses. The same is true of the Bihar Road Transport Corporation which has been incurring losses year after year since 1963-65 even though it has been budgeting for profits in each year.

As regards the last point, public enterprises do have some system of financial control, but more often than not, there is no coordinated action to ensure that the overall budgeted results are realised.[2]

1. A few major undertakings having statistical units are The Indian Oil Corporation Ltd., Export Credit and Guarantee Corporation Ltd., Hindustan Steel Ltd. and the National Coal Development Corporation Ltd.
2. The available information indicates that few enterprises have even a rudimentary system of management accounting One notable exception seems to be the Neyveli Lignite Corporation Ltd.

In a major way, this may be attributed to the inability of the top management to obtain information in sufficient details and covering the aspects as indicated above. But to a significant extent this may also be accounted for by the delays in the communication of operational results to the top management from the lower levels in the management hierarchy.[1] Unless the top management is informed of the quality of the performance of the enterprise and the related matters at the time when things are actually happening, it would not possibly be able to take corrective action to ensure that the expected results are realised. Delays in communication have an adverse effect on both the formulation and implementation of policies.

5. Administrative Factors Accounting for Defects in Policies

To a significant extent the defects in the pricing policies may be attributed to the administrative constraints under which they are formulated. The relationship between the Government and the enterprises on this question is rather very complex. Apparently, barring a few exceptions like the electricity undertakings, the Government has

1. To take a rather extreme kind of example, in the case of the Bihar State Road Transport Corporation, the compilation of the operational and financial results of the enterprise takes about one year so that the management comes to know about them much after the accounting period to which they relate has elapsed.

left the enterprises completely free in the matter of pricing. A study of the enabling statutes of the 6 major corporations and the articles of association of 47 Government companies shows that apparently, the Government has left the enterprises almost entirely free in the matter of pricing. There is virtually no reference to the question of pricing in them.

Yet in a majority of cases, the Government does exercise a significant amount of explicit or implicit control over the pricing policies of these enterprises, and one of the important aspects of pricing over which the control of the Government extends is that of earning of surpluses. There is considerable evidence to show that in many cases the Government lays an explicit or implicit obligation on the enterprise to earn a certain amount of surplus. The obligation is most explicit in those cases in which prices are fixed by, or in consultation with, the Government, for in such cases the Government makes an explicit allowance for it in fixing the prices.[1] Even if there are no explicit obligations of

1. The replies given by the public enterprises to the questionnaire issued by the Study Team revealed that in the majority of the enterprises pricing is done either explicitly by the Government or in consultation with the Government. As a matter of fact, there is not much of a difference between fixation of prices by the Government and that in consultation with the Government. In either case, the Government has the final say. (Concrete instances of enterprises, which fix their prices in consultation with Government, are provided by the Hindustan Cables Ltd., the Neyveli Lignite Corporation Ltd. and the Bihar State Road Transport Corporation Ltd.)

this kind, the Government representatives on their control boards are not averse to conveying the wishes of the Government to them on this question which has an almost compulsive effect.[1] Further, the general policy announcements by the Planning Commission on these questions from time to time tend to be taken as policy directives by these enterprises.

The keenness of the Government to ensure that the public enterprises are earning surpluses is seldom accompanied by an equal measure of keenness to ensure that they are following the right kind of output policy. As a result of this, there is no particular anxiety on the part of the enterprises to produce at the optimal level of capacity, nor are they keen to reduce their costs by improving their technical efficiency.[2] Keeping in view the fact

---

1. In the course of the interviews by the author, of some top managerial personnel in public enterprises, it came out that the senior government officials represented on the control boards pf ~~in; e enter/rses do not~~ public enterprise do not always maintain a clear distinction between their role as a government official and that as a member of the top decision making body in the enterprise.
2. In the course of his evidence to the Study Team on Public Untertakings, Shri M.S. Rao, Chairman of the Hindustan Steel Ltd. laid particular emphasis on this point. Explaining the two aspects of cost reduction, by fuller utilisation of existing capacity and by improvements in the usage of inputs he, alleged, that instead of trying to reduce costs by efficient use of resources, public sector enterprises, anxious to secure a return of 10 to 12 per cent expected of them by the Planning Commission and the Government, try to load it on to their prices, sometimes, without reference even to their own production efficiency and almost invariably without thought about the consequences that would follow.

that the majority of enterprises do possess a fairly significant degree of monopoly power the Government's concern for their financial results should be accompanied by an equivalent measure of concern for their output policy as well. Of course, it is true that under the existing market conditions, a step in this direction need not ensure economical usage of resources, but it would certainly contribute towards a better utilisation of capacity.

There is a further aspect of the Government's engagement with this matter, which acts as an added factor to complicate the situation. There are cases of public enterprises operating under vague constraints in regard to pricing, the inter-pretation of which is more or less left to the management. Thus the road transport undertakings are expected to provide 'economical' and 'efficient' services to the people.[1] What exactly is meant by 'economical' is left to the management of the enterprise to decide presumably in consultation with the State Government concerned. Vague policy directions of this kind lead to an atmosphere of confusion in the formulation of policies, as the management is not quite confident of moving in any direction. In some ways, it might be better to leave the management entirely free than to give them vague and confusing directions.

1. The Road Transport Corporation Act 1960; Chapter II, para 3.

To a large extent, ~~the lost~~ much of avoidable irrationality in pricing policies on considerations of public interest may be attributed to this factor. As has been stated in a previous section, public interest is undoubtedly an important consideration bearing on the pricing policy of public enterprises. But lack of clarity in regard to its content has often lead to remarkably inconsistent policies.

A very good example of this is provided by electricity and transport undertakings. Public electric supply undertakings are generally expected to provide power at concessional rates to the agricultural sector. Further, in some States, massive investments are being planned for supplying power to the industrially backward areas, where the likelihood of growth of industry is apparently very meagre; whereas the areas with potentiality for industrialisation are likely to face shortage of power.[1] Such

---

1. In this context, the following extract from the Annual Financial Statement of the Bihar State Electricity Board for 1964-65 is very relevant:-
"Unlike private undertakings, the Board does not confine its activities to places where the demand is concentrated and investment is profitable. Although it is primarily intended to be a profit-making organisation on a modest scale, it has to be alive to its social obligations. It has, therefore, to undertake, within acceptable limits, electrification of the rural areas with a view to giving facilities even in the remote villages for the promotion of small scale industries, irrigation facilities, etc. In these areas, however, it takes a long time before the load develops but the expenditure on maintenance is appreciable almost from the very start".

The investment expected to be made by the Board in rural electrification during the Third Plan period aggregated Rs.363.50 ~~crores.~~ lakhs

decisions are hardly based on a rational calculation of the costs and benefits involved. As for nationalised transport, price differentials between different categories of routes are seldom based on a rational calculation of the differential costs. To a certain extent, of course, threadbare correspondence between fares and costs in such services is inadvisable on grounds of the inconvenience that it would cause. But much of the presently existing discrepancy between the two may be attributed to some concern for public interest.[1]

In the case of enterprises dealing with a relatively small number of buyers, absence or distortion of policy results from an absence of compulsion on the part of buyers to give a fair deal to the sellers. The same may be said about the sellers, if their side is stronger than that of the buyers. In all these cases, in which the market condition is such as to give rise to an occasion for higgling and bargaining, rationality in pricing policy can be ensured through some kind of compulsion, or through mutual agreement between the parties concerned. At present, there is a complete lack of the administrative machinery needed to resolve the problem in either ways. To a limited extent, such problems are being tackled by the administrative ministries concerned. But, on the whole, the matter is

1. The available statistics on the operation of the Bihar State Road Transport Corporation show that town services are almost invariably uneconomical. Yet the Corporation has been reluctant to increase the fare for these services.

left to be thrashed out between the sellers and buyers themselves.

6. Administrative Factors Responsible for Defects in Implementation of Policies

The most important factor to be taken into account in this context is the inadequate appreciation of the urgency in regard to earning of profits on the part of the managements of public enterprises. Notwithstanding the Government's explicit or implicit intention to earn an adequate return on its investments, there is virtually no assessment of the performance of the management in the light of the financial results of the enterprise. The chief executives of public enterprises or, for that matter, the members of their control boards, have no personnel stake in the financial performance of the enterprise and somehow they are not being rewarded or punished for how the enterprise performs on the financial front.

Much of the difficulties in the way of a proper planning of prices can be attributed to the absence or inadequate staffing of the economic and statistical units in these enterprises.[1] Whatever statistical units they

1. Out of the 42 Central Government undertakings which responded to the questionnaire issued by the Study Team, only 11 were having statistical units with them. Even among these, there were only a few which could claim to have developed their units to a level which would enable them to undertake tasks of a serious nature.

have is generally over busy filling up and sending the numerous proforma of reporting to the administrative ministries. Broadly, it may not be too far from the truth to say that the economic and statistical units within the enterprises are used more to keep the outside individuals or organisations informed about the working of the enterprise than to keep the management of the enterprise itself informed of the same.

The available information indicates that in most enterprises statistical units are virtually treated as unnecessary appendages to the organisation.[1] They are not expected to play any important part in the formulation and implementation of policies - a fact which stands in strange contrast to private undertakings which are now increasingly realising the necessity of obtaining the help and advice of qualified economists and statisticians in formulating their policies.

Along with it is a lack of coordination between the statistical, planning and budgetary units within the organisations, as a result of which not unoften the different sections are not fully aware of the work being done by other sections, and are not of much help to

1. The replies to the questionnaire circulated by the Study Team provide an indirect evidence of this. No enterprise made even the barest reference to its statistical unit while discussing the role of its various administrative units (e.g. budget and accounts section) in the implementation of its policies.

each other.[1] The planning units which most enterprises have are entrusted with the task of formulation of both long term and short term programmes of output and investment, while the budgeting sections bear the responsibility for preparing the annual financial estimates of income and expenditure. Obviously, in order to be able to plan in a realistic manner, the unit in charge of it must have detailed statistical information about the operations of the enterprise. Similarly, the unit in charge of budgeting must have full knowledge of the behaviour of costs and revenues in response to changes in output. But not unoften these administrative units within the enterprise work with the spirit of a clear cut demarcation between their jurisdictions and responsibilities.[2]

---

1. Out of the 11 Central Government undertakings which are having statistical units (please see footnote 1 on page 63), in the case of only one - the Fertilizer and Chemicals (Travancore) Ltd. - there appears to be some coordination between the work of the Accounts and the Statistical units.
2. To take a concrete illustration, in the case of the Bihar State Road Transport Corporation, the budget section does not bother much to draw upon the statistical and planning sections to obtain necessary information for sound budgeting. In a rather strange way, while the preparation of costs and revenue estimates for the existing services is a charge of the budget section, it is the planning section which prepares the relevant estimates relating to new services (expansion). The statistical section is concerned only with post mortem collection of information without having much to contribute in the preparation of either the physical or the financial programmes of the enterprise.

In some measure, the failures of the public enterprises in making precise estimates of the relevant aggregates for profit planning may be attributed to absence of perspective planning. Many enterprises do prepare some kind of estimates of expansion in future, in fulfilment of the requirements in this regard by the parent ministries in the Central or State Governments (as the case may be) and the Planning Commission. But these estimates are generally of a fairly broad nature, giving a bare outline of the expansion schemes and the amount of investment planned for the future. For one reason, they can hardly be taken as a sufficient reliable and stable basis for formulating concrete programmes of operations, which is that the programmes of investment have to be approved on an annual basis, first by the administrative ministry concerned and then by the Parliament or the State Legislature, in the case of public corporations.

Further, the general approach to budgeting and financial control that most enterprises have at present is not conducive to the implementation of their pricing policies. Barring a few notable exceptions like the Chittaranjan Locomotive Factory, the approach to budgeting is generally oriented towards the juridical control over expenditure rather than a control over operations. The

budgets of the State Government corporations are in particular more or less patterned on the budgets of the Government. A number of public enterprises do not prepare detailed budgets at all, a notable example being the Hindustan Cables Ltd. This limited approach towards budgeting stands in the way of their taking steps towards relating the financial results of the enterprise available from the periodical reviews of incomes and expenditures to the operational results. And unless they do that they would not be able to take corrective measures to ensure the realisation of the objectives of their pricing policies.[1]

7. Suggestions for Reforms on Administrative Questions.

In the first place, it is necessary to streamline the relations between the Government and enterprise on questions relating to pricing. As stated above much of presently existing muddle and confusion in regard to pricing in public enterprises may be traced to the inadequacy of the Government's role in providing guidance to the public enterprises on this question.

The question may be asked whether it would be better to leave the enterprises completely free in regard to price and output policies. The answer would obviously be in

1. This point has been dealt with in greater detail in a paper on "Budgeting in Public Enterprises" by the author.

the negative. There is every reason for the Government having control over such an important matter as pricing. Thus, it is legitimate on the part of the Government to exercise control over the pricing policy of the public enterprises. But the control thus exercised should be rational and consistent with the overall expectations from public enterprises.

As a first step in this direction, the Government should indicate the financial obligations of public enterprises in more specific terms. In the last two Plans, no statement was made on the return expected on the capital employed in the public enterprise sector, although they did indicate the expected contribution of public enterprises to plan resources in overall terms. In the Fourth Plan (draft outline), credit has been taken for generation of surpluses amounting to Rs. 1,085 crores from public enterprises. The document does not, however, give an undertaking - wise break-up of this total; nor does it provide a clear statement of the manner by which this total is arrived at. It does make a mention of the desirability of obtaining a rate of return of 11 to 12 per-cent on the capital invested in public enterprises. But sufficient care has not been taken to define the term capital employed and specify the method of calculation of the rate of return thereon. The Government should explicitly specify the

general financial and economic obligations of public enterprises indicating the output and pricing policy that the public enterprises operating in different industries and market situations should follow:-

In addition to this, the Government should provide a "financial framework" to each enterprise indicating, inter alia, the following:

(a) the output and pricing policies that the enterprise should follow;

(b) the norms for the determination of the cost-bases for fixation of prices;

(c) the bearing of public interest on the formulation of pricing policies; and

(d) the distribution of responsibility for interpretation of public interest between the Government and the management of the enterprise.

If generation of surpluses constitutes a major objective of the pricing policy of public enterprises, it would be better if the Government confined its directives to the management of the enterprise to output policies, leaving the prices to be fixed by them in accordance with the market situation. This should be particularly helpful in the case of monopoly type enterprises. As a matter of fact, the greater the emphasis on generation of surpluses, the greater would be the need for giving freedom to the management in the matter of pricing. Of course, in the case, of public utilities like electricity and transport it would be neither advisable nor possible to leave the question of pricing entirely to the management of the enterprise. But

in other cases, including the enterprises in intermediate goods industries, it should be possible to adopt this policy.

The obligations of the enterprise in regard to output policy may, in general, emphasize the production of full capacity output. The profits earned by the enterprise at full capacity output would show the marginal productivity of capital invested in the enterprise. At the same time they would represent the maximum amount of surplus that the enterprise can generate without resorting to output restriction.

One possible disadvantage in leaving the prices to be determined by the management of the enterprise may be that, in that case, there would be no explicit compulsion on the management to keep a watch on its costs. One way in which this problem may be tackled would be to prescribe some general norms regarding costs in the "financial framework" laid down by the Government. If the "financial framework" is not expected to cover that much of details, it may, at least, indicate the methods on the basis of which such norms can be determined. Alongwith this, it may contain an additional provision that the excess of the actualised costs over the normative costs would be deducted from the surpluses earned by the enterprise and surrendered to the Government as a kind of fine, unless there are some special

circumstances beyond the control of the management to justify this excess.

Public interest becomes a significant factor in pricing policy only in case it comes into conflict with the normal commercial obligations of the public enterprises. As far as possible the Government should take upon itself the responsibility for defining what constitutes public interest and specify the same in the "financial framework" within which the enterprise is expected to operate. In particular, it should indicate the extent to which the enterprise should sell at less than cost of production on considerations of public interest. In case some amount of discretion is permitted to the management in the matter of interpretation of public interest, it should be left open to it to seek explicit sanction from the Government for the steps taken by it in this direction.

Thirdly, there is need for a greater measure of uniformity ~~on~~ in the procedures relating to pricing. For this, it would be necessary to ensure, on the one hand, that each enterprise knows about what others are doing and, on the other, that the Government takes into account facts about the working of not only the enterprise in question, but also other enterprises in the public sector. This would incidentally help the estimation of the overall financial obligations of public enterprises in more concrete terms.

Fouthly, the internal organisational structure of the public enterprises needs to be rationalised **with a view** to improving both the formulation and implementation of policies. Each enterprise should be required to set up an economic and statistical department and a management accountancy cell within this department. As far as practicable the administrative units in charge of budgeting, planning and statistics should be placed under the charge of the same administrative head-preferably, the Financial Adviser or the Chief Accounts Officer in order to secure adequate coordination between their work.

Lastly, steps should be taken to ensure greater coordination between the pricing policies of enterprises which are inter-dependent on each other in a significant way. The problem of inter-undertaking disputes is going to increase as the existing units go into production and new units are set up. At the moment, such disputes are being resolved, to some extent, through lengthy correspondence and discussion between different administrative Ministries. The available evidence, however, shows that the existing procedures are father inadequate to meet the requirements of the situation.

It has for some time past been suggested that a permanent administrative organisation (usually designated as the Central Price Commission) should be created both to serve

as a central pool of information on the working of the public enterprises and as an agency for arbitrating on the disputes between them on financial matters. It appears that generally speaking, the public undertakings are averse to the setting up of such an organisation. The general apprehension is that an organisation of this type would tend to assumme control functions, which would impinge upon the autonomy of public enterprises.

As a matter of fact, there is hardly an adequate justification for creating a new organisational machinery for giving effect to the suggestions made above. On the one hand the functions of some of the existing organisations dealing with public enterprises may well be suitably modified and expanded to serve many of the objectives which a new organisation like the Central Price Commission would serve. The setting up of the Commission would rather result in an unnecessary duplication of the organisational machineries capable of handling identical kind of tasks.

Thus the task of collecting information on the financial policies and procedures may be entrusted to the Bureau of Public Enterprises in the Ministry of Finance of the Government of India. To a certain extent it may also provide the necessary guidance to the Government as well as the public enterprises on matters relating to pricing policy. Being situated in the Ministry of Finance it may reasonably be expected to command sufficient respect to enable it to

function as a clearing house of information and as an agency for guiding the authorities concerned on technical matters.

On the other hand, it is difficult to see how an administrative agency like the Central Price Commission would contribute towards securing better coordination between the price policies of different enterprises. The administrative implications of the problem would depend upon whether the enterprises in question are controlled by the same Government or by different Governments. Cases of conflict between the interests of enterprises operating under the same Government - Central or State - can be effectively tackled by the Government concerned. The Government inevitably reserves powers to issue directives to public enterprises established by it. The Government would, therefore, always be in a position to straighten out the disputes between the enterprises established by it with a certain measure of finality.

Problems of coordination of this category need not, therefore, necessitate the creation of a statutory administrative body exclusively devoted to this task. Each case of dispute may be taken up on an ad-hoc basis and dealt with by a committee on the recommendations of which the Government may issue necessary directives to the enterprises concerned. In case, however, such cases occur frequently, the Government may create a permanent committee (e.g., the Committee of secretaries) to deal with these questions.

One advantage in creating a standing committee for the

~~One advantage in creating a standing committee for the~~

puspose may be that it might ensure a greater measure of "fairness" in the decisions taken on such issues.

Coordination between the policies of enterprises set up by different Governments, may not, however, be as easy to secure. Disputes between them may well develop into inter-Government disputes. It is difficult to see how an element of compulsion can be brought about in resolving these disputes. In the ultimate analysis, the only way in which such problems can possibly be resolved is by mutual agreement between the parties concerned.

Yet, some kind of an organisational framework may be of help for a proper appreciation of the issues in question by the parties concerned. The administrative agency dealing with the question would have to command the confidence of the parties concerned. This, in turn, implies that it would have to be created with the consent of the parties concerned and further that the composition of the Committee must be such as to represent the various interests involved. An administrative agency created by the Central Government is not likely to satisfy this requirement.

One such organisation to which cases of this kind could be referred might be the already existing Zonal Councils. It is doubtful, however, if the Zonal Councils, possess sufficient technical competence to undertake tasks

of this nature. Keeping in view the nature of the problem it would obviously be advisable to refer them to more specialised administrative agencies.

There are two other alternatives which may be considered in this regard. One is the creation of a standing committee of officials. A standing administrative organisation on which the interests of the Governments as well as enterprises are represented, may, however, become too big to work effectively. The other alternative is that of creating an ad-hoc committee to deal with each problem as and when it arises. This seems to be a better device than the former. The main advantages of adopting this procedure would be two-~~fold~~. Firstly, it would make it possible to get each problem examined by persons most competent to do the job. Secondly, it would help quick disposal of cases. Much however, would in any case depend upon the mutual goodwill and understanding between the contending parties.

Budgeting in Public Enterprises

1. Introduction

Budgeting is both a management philosophy and an instrument of action. It enables "all those in an organisation who are responsible for the use of resources to project their ideas into the future, and concurrently to look back to see how performance compared with premise and intentions".*

Basically, it emphasises two aspects of the management function; the functions of planning and control. The importance of these two functions of management in the context of the administration of business cannot be over-emphasized.

For some time past, the budgetary practices of public enterprises have been subjected to extensive criticism. The Estimates Committee of the Lok Sabha has not been quite satisfied with the existing position in this regard.

In its 20th Report, (Second Lok Sabha) the Committee recommended that the public undertakings should prepare a performance and programme statement for the budget year together with the previous year's statement. It further recommended that these enterprises should be encouraged to prepare business-type budgets. These recommendations were reiterated by the Committee

---

* Quoted from an unpublished note on this subject by Mr. P.L. Tandon, Chairman, Hindustan Lever Ltd.

in its 73rd Report (Second Lok Sabha). The Government gave an assurance to the Committee to take necessary steps in this direction. But it is difficult to say if adequate progress has been achieved in this direction so far. The question deserves a detailed examination.

2. The Existing Position

As an instrument of planning and control of operations, the aspects of the existing budgetary practices that merit special attention are (a) the period for which budgeting is done i.e., the "time-span" of budgeting; (b) the magnitudes in respect of which budget estimates are prepared i.e., the 'coverage' of budgeting and (c) the mechanics of budgetary controls.

2.1 The Time Span - Most Public enterprises in India do not prepare budgets covering a period of more than one year. As such the use of budgeting as an aid to forward planning is rather limited in the public enterprise sector. It is true that these enterprises do prepare a kind of perspective plan at the interval of every five years, on the eve of the preparation of the national five-year plans. The circumstances in which these plans are prepared are more or less compulsive in nature, insofar as the basic objective behind the preparation of the same is to fulfil the obligation placed on the enterprises

in this regard by the Planning Commission and the Government. The scope of these plans (which may be better described as "programmes") is, however, limited covering the expansion of capacity and thereby aggregate output. Further, the methodology used for making projections of the relevant aggregates e.g., marketable output, is rather crude.*

On the whole, budgeting in public enterprises is more or less on an annual basis. Expenditure on capital accont during the budget year is determined keeping in view the constraints of availability of funds from the Government about which information is usually communicated to them beforehand. Estimates of revenue expenditure are prepared on the basis of (a) past year's results and (b) the likely effects of the fruition of expansion of capacity proposed to be effected during the budget year.

2.2 Coverage and Scope - The coverage of budgeting is reflected partly in the constituents of the budget and partly in the type of classification that is followed. The public enterprises may be placed into three categories from this point of view.

---

*Of course, in the case of major industries, the "plans" of the enterprises are based on the relevant projections made by the Planning Commission. But the reliability of the Planning Commission estimates, themselves, may be questionable and to that extent "planning" in public enterprises would be open to criticism.

In the first place, there are a few like the Chittranjan Locomotive Factory, the Bharat Electronics Ltd. and the Heavy Engineering Corporation which prepare fairly detailed budgets. The budget of the Heavy Engineering Corporation (HEC for short) apart from incorporating summary statements of receipts and expenditures in the revenue account and capital account, also gives the programmes of production, revenue and expenditure in each of the major units of production. Thus detailed budgets are prepared for the Foundry Forge Unit, the Heavy Machine Building Project, the Heavy Machine Tools Project, and also the Jagannathnagar Township. Besides, a summary of common charges for the Corporation as a whole is also provided.

The budgets of these enterprises broadly satisfy the objectives of performance budgeting as well as business budgeting. By showing the distribution of investment expenditure by end-results and that of costs by the major constituents of the product-mix, they satisfy the main objective of performance budgeting which is to show the distribution of expenditure by end-results. By relating the budgeted financial results of the enterprise to the operations and achievements of the enterprise in physical terms, they go a fairly long way towards meeting the requirements of business budgeting. Of course, as pointed out at a later stage, they are by no means very near to what could possibly be done in these respects yet they

contain elements of performance as well as business budgeting.

In the second category may be put the enterprises which prepare budgets which while being fairly detailed, are framed on what may be called as the traditional pattern. The principal magnitudes in regard to which projections are made are more or less confined to expenditure and receipts in financial terms. To this category would belong the budgets of most public utilities and transport undertakings. The budget of the Bihar State Road Transport Corporation can be taken as an illustrative case in this regard. The Corpoation's budget comprises summary and detailed statements of expenditure and receipts in the capital and the revenue account and a few explanatory tables giving the details of the totals under some important heads in the above statements (e.g., Funds, Deposits and Advances).

The classification of expenditure in the revenue account is first according to the functional categories in which the operations of the Corporation have been divided e.g., "Traffic " (Operational) and "Workshop and Maintenance". The aggregates under each of these categories are further detailed in an objectwise distribution.

The classification of expenditure in the capital budget of the Corporation is broadly object-wise, aggregate expenditure

being distributed between "land","building", "electrical installations", etc.

Broadly, the system of classification of expenditure adopted in the budgets of the enterprises belonging to his category do not show expenditure by activities and end results and as such do not conform to the objectives of performance budgeting. Further, budgeting in these enterprises is limited in scope and coverage, being largely confined to what may be called as "planning of expenditure". It does not underline the overall objectives of the enterprise and the interrelationships between the various parts of the activities of the enterprise, as production and sales. Thereby, it fails to approximate to the requirements of business budgeting.*

In the last category may be placed those enterprises which prepare very short budgets. Examples of such enterprises are provided by the Hindustan Machine Tools, the Hindustan Cables and the Hindustan Photo Films Company. The budget of the Hindustan Cables, a rather clumsy document, is broadly

---

* The above is by no means intended to suggest that the enterprises belonging to this category do not plan their activities in non-financial terms. The estimates, of expenditure, and receipts are prepared on the basis estimates of physical targets of services to be provided and the likely costs of the same in physical terms. But the budgets by themselves do not indicate the programming in physical terms and the relationship of the financial estimates with the programmes formulated in physical terms.

comprised of a revenue budget, a capital budget and a ways and means statement. Expenditure on revenue account is shown in two ways, according to the major objects of expenditure e.g., 'raw materials', wages and salaries, and according to the major departments of the enterprise. A tentative forecast of profit, based on the estimates of revenue and expenditure indluded in the budget is also included as part of the revenue budget. Receipts on the revenue account are detailed according to the sale proceeds from the various items produced by the Corporation. Expenditure on capital account is shown in three parts: (a) carry over items, (b) new items and (c) current expansion project. A separate statement showing the distribution of aggregate capital expenditure between the different departments of the enterprise is also provided. Receipts on the capital account are shown in the overall ways and means statement as well as in a separate statement showing the sources from which the funds would be forthcoming. Apart from the above, the budget incorporates statements giving the details of totals of receipts and expenditure under some important subheads in the revenue budget such as Miscellaneous Expenses, Sale Realisation, etc.

The budget of the Hindustan Photo Films Manufacturing Co. is again broadly consisting of three parts viz., (i) capital budget, (ii) revenue budget and (iii) ways and means budget.

Expenditure on the capital account is classified according to the major objects of expenditure e.g., "plant and equipment", "land and buildings" and "township". This type of classfication obviously does not show expenditure by major end-results. The classification of expenditure in the revenue budget (summary) is also broadly by the major objects of expenditure e.g., raw materials, direct labour, transport, etc. The ways and means budget provides an account of the likely financial position of the company taking into account both the revenue and the capital budgets. Classified in this manner, the statement of expenditure fails to show the distribution of the costs incurred by the enterprise either by the responsibility centers or by the main components of the product-mix.

The wide variations in the classifications as well as the scope of budgeting indicate that the public enterprises are not guided by an uniform set of principles or objectives in preparing their budgets. Further, it appears that taking the public enterprise sector as a whole, steps are just beginning to be taken towards introducing a sophisticated budgetary system, much ground being yet to be covered in this direction.

2.3 Budgetary Controls - Most enterprises do have a system by which the top management is kept informed of the progress achieved in the various targets set in the budget. The extent

to which the budget itself provides the basis for management information and reporting depends, for obvious reasons, on the coverage and scope of budgeting.

In the case of those enterprises the budgets of which have a fairly detailed coverage, reporting in respect of the quantities incorporated in the budget keeps the management informed of the achievements and failures of the enterprise in the different facets of its activities. The budgetary practices in the Fertilizer Corporation of India as well as the Bharat Electronics provide ample evidence of this. The budgets of these enterprises incorporate details regarding production and sales targets and the management is kept informed of the achievements in respect of these at regular intervals during the budget period. The reporting is usually on a monthly basis, supplemented by a quarterly assessment of performance against the budgeted estimates.

The position in respect of the enterprises which confine their budgeting to financial aggregates is slightly different. In the case of these, reporting in respect of the aggregates included in the budget provides the top management with only a partial assessment of how the enterprise is faring. The financial aggregates are, of course, generally, based on the relevant estimates in physical terms, but as they are not

taken into account explicitly in budgeting, reporting in respect of budgeted quantities does not provide an account of the extent to which they are being realised.

However, many enterprises which otherwise confine their budgeting to more or less financial aggregates do have some system of management reporting in respect of physical targets, although it does not form part of their budgetary process. To take the familiar case of the Bihar Rajya Transport Corporation, even though the reporting with reference to budgeted quantities is on the whole confined to progress of expenditure, the management is separately informed about the position in respect of operational performance, e.g., services provided, realised load factor, breakdowns, etc. In fact most public enterprises, irrespective of their approach to budgeting, have taken significant measures towards developing a system of management reporting, as revealed by the studies made by the COPP Management Group in this regard.* A few notable

*A note on Management Reporting in Public Enterprises (unpublished); prepared by the COPP Management Group, Planning Commission, Government of India.

undertakings covered by the COPP Management Group in its studies are the Indian Airlines Corporation, the India Telephone Industries and the Delhi Transport Undertaking. The India Airlines Corporation, for instance, has adopted a very extensive system of management reporting which provides for a continuous inflow of information on almost all operational matters to the top management. The same could be said to be more or less true of some other enterprises covered in these studies e.g., the Indian Telephone Industries and the Delhi Transport Undertakings.

3. Deficiencies in the Existing System

An important deficiency of the existing budgetary practices in public enterprises is the absence of a sufficiently long perspective. The one year period for which budgets are prepared is often too short and does not provide an adequate basis for planning its operations. Related to it in some respects is the crudily in the methods for making the relevant estimates. The undue emphasis placed on historical factors for making projections for the future may to a certain extent be attributed to the short period perspective that the management has in view in preparing the budgets of these enterprises. With a longer perspective in view the management would be under greater pressure to be more precise in making the relevant

estimates (e.g., of expected returns from investment) for the purposes of budgeting.

The major deficiencies in budgeting, however, arise from the fact of limited coverage and the traditional or object-wise classification in the budgets of most public enterprises. The absence of the details of various important aggregates relating to the operation of the enterprise impairs the potentiality of the budgetary mechanism as an instrument of communication and control. As a result of the absence of an explicit inclusion of the details regarding the constituents of the various aggregates included in the budget the interactions of unforeseen changes in one variable on others are not immediately apparent. This in turn stands in the way of taking timely decisions about the right course of action directed to safeguard the overall interests of business. The object-wise classification tends to blur and possibly misdirect the focus of control by implicitly putting emphasis on realisation of targets in respect of expenditure rather than the purposes or end-results for which expenditure is incurred.

It is possible that if the management had a built-in organisational framework for an efficient and timely analysis of the data reported to it, the inhibitary effects of budget form on communication and control over operations could be neutralised. The data flowing to the management on different

facets of its operations could have been analysed to show (a) whether changes in the parametric conditions, if any, necessitated a recasting of the budget and (b) whether the realised results corresponded to the budget estimates, and if not, what precisely were the reasons for that.

At present public enterprises do not however, seem to have evolved a system by which such an analysis is made. Many enterprises just do not have the organisational framework and the expertise needed for the purpose. A study of the internal organisational structure in some major public undertakings reveals that out of 43 Central Government Undertakings only 11 have such statistical units which judged by their own standards, can be regarded as satisfactory.* Even those enterprises which do have some kind of an organisational set up for the purpose, by way of statistical units, hardly make an endeavour in this direction. The situation, as it exists at present, is that in most enterprises data on financial and non financial matters are fed to the management by different agencies, the former usually by the

---

* Some of the notable public undertakings which just do not have statistical units are Indian Drugs and Pharmaceuticals Ltd. and the Moghul Lines Ltd.

budget section and the latter by the functional heads of the departments and the task of drawing inferences from them is almost entirely left to the top management, which, obviously, cannot possibly spare sufficient time for the same.

4. Some Basic Factors Behind the Existing Deficiencies in Budgeting

The budgetary practices in public enterprises have evolved from that in the Government and this is perhaps the most important factor accounting for the deficiencies therein. The approach and philosophy behind government budgeting (or, to be more precise, the traditional type of budgeting) still lingers in the budgetary practices of public enterprises. The coverage and scope as well as the classification of receipts and expenditure adopted in the budgets of public enterprises reflect the impact of traditional budgeting in varying degrees.* The focus of traditional type of budgeting is mainly on control of expenditure, the objective being to ensure that the expenditure actually incurred does not exceed the amount for which authority for spending has been obtained. There is, no doubt,

* The budgetary practices of the Bihar Road Transport Corporation provide a good example of this. Budget preparation in the Corporation is strictly based on explicit government directives in that regard. Of course, the obligation on the enterprise to prepare its budget in a certain manner for presentation to the Government does not prevent the enterprise from having a more sophisticated and operationally useful system of budgeting. But the existence of explicit government directives in this regard produces on inertia on the management towards evolving a new system of budgeting.

a good deal of justification for this approach, but that is not the kind of approach which would be suitable for public enterprises. For, in the case of commercial undertakings, planning and control of expenditure as such has no special significance. Expenditure constitutes a means to achieve certain ends which would equally depend upon several other variables the most important of which may be the revenue receipts or, to be more precise, the sale proceeds of the enterprise.

But historical factors apart, the deficiencies of the existing budgetary systems may, to a significant extent, be attributed to the fact that the objectives which the management is expected to pursue, are themselves often not very clear. For instance, the management of the enterprise is seldom adequately clear about the obligations of the enterprise in respect of the output to be produced or the rate of return to be earned on capital. As a matter of fact, there is a considerable measure of diffusion in the authority for decision making on some of the vital issues, in the way of the management having a clear view of what it is striving for. The lack of precise objectives stands in the way of the development of a

a good deal of justification for this approach, but that is not the kind of approach which would be suitable for public enterprises. For, in the case of commercial undertakings, planning and control of expenditure as such has no special significance. Expenditure constitutes a means to achieve certain ends which would equally depend upon several other variables the most important of which may be the revenue receipts or, to be more precise, the sale proceeds of the enterprise.

But historical factor apart, the deficiencies of the existing budgetary systems may, to a significant extent, be attributed to the fact that the objectives which the management is expected to pursue, are themselves often not very clear. For instance, the management of the enterprise is seldom adequately clear about the obligations of the enterprise in respect of the output to be produced or the rate of return to be earned on capital.* As a matter of fact, there is a considerable measure of diffusion in the authority for decision making on some of the vital issues in the way of the management having a clear view of what it is striving for. The lack of precise objectives stands in the way of the development of a

---

* This point has been discussed in greater detail in the author's paper on "Pricing in Public Enterprises".

sense of direction for the managerial activity, of which budgeting is a part. If the management is not very clear about its objectives regarding production and pricing there is no implicit or explicit compulsion on it to orient its budgeting to realising its commercial or non-commercial objectives, which in turn is manifest in the lack of anxiety on its part to abandon the traditional approach towards budgeting and all that it implies.

Lastly, the virtual absence of accountability on the part of the management for the financial results of the enterprise may also be contributing towards the same. It is obvious that when the objectives which the management is expected to pursue are not precisely defined, the management cannot possibly be held accountable for any particular set of results. Nevertheless, most public enterprises do not at present have even an explicitly stated minimum obligation of covering their costs. A study of the enabling statutes of some major public corporations and the articles of association of 42 Central Government Companies reveals that the Government has not put even this minimum obligation on them. Of course, in the case of many enterprises, the enabling statutes or the articles of association, as the case may be, do contain provisions which might be interpreted to signify an obligation of that import. That, however, is obviously not sufficient

since the very possibility of different interpretations detracts from the force of the provision.

5. Suggestions for Reforms

The need for reform in the budgetary practices of public enterprises has been felt for long. Various suggestions have been offered in this regard, but generally the focus of these suggestions has been on technical matters relating to budgeting. What is perhaps needed is a change in the management philosophy which gets reflected in the budgetary practices that obtain~~s~~ at present in the public enterprise sector. This, however, need not undermine the importance of reforms in the technical aspects of budgeting, since there is an inevitable link between the two: the overall management philosophy and the technique of budgeting.

As a first step towards budgetary reform the overall obligations of public enterprises, generally as well as individually, should be defined with a greater measure of precision and clarity. The obligations of the enterprise may be both in respect of financial and non-financial matters, the latter possibly having financial implications. To borrow a phrase which has already been used elsewhere, each enterprise should be given a precisely

defined "financial framework" which should clearly bring out in particular the policy of the enterprise in regard to output, prices and the rate of return on capital. With its objectives defined in precise terms, it would be possible for the management to orient the focus of its budgeting in more meaningful directions than it is doing at present.

Secondly, public enterprises should, in general, be required to prepare their budgets in greater detail than they do at present. The budgeted expenditure should be classified in a more meaningful manner showing the distribution of expenditure according to (a) the programmes and activities to be financed by the proposed expenditure, (b) the end results flowing from the expenditure in question and (c) as far as possible, the structure of responsibility centers in respect of the programme to be realised. In other words, there is need for introducing a greater measure of "performance element" in the budgetary classifications. Further in a business enterprise, there is an inevitable link between expenditure and revenue, both bearing on the overall results that is sought to be realised. The budget should, as far as practicable, bring out the relationship between the different variables on revenue and expenditure and further the bearing of revenue and expenditure on the profitability of the enterprise.

The above need not necessitate a complete redesigning of the presently existing budgetary system.

The broad divisions in which public enterprise budgets are being prepared at present (viz., capital, revenue and ways and means budgets) may well be retained. But the contents of each would have to be classified and presented in a different manner. Expenditure on the capital account would have to be shown project-wise, the expenditure on each project being further distributed between the main constituents of the project (activities) and the objects on which money is to be spent. The aggregates for each project would have to be further distributed according to the responsibility-centres. To a certain extent, the same pattern of classification of expenditure might satisfy the above requirements.

The revenue budget would have to be recast to present an account of the receipts and expenditure by (i) the main components of the product-mix of the enterprise, (ii) the responsibility-centres for realising the expected results and (iii) the economic characteristics of the budgeted costs. The revenue budgets of most public enterprises, as they are at present, provide a consolidated picture of the receipts and expenditure relating to the operations (in productive or servicing activities) of the enterprise. The consolidated

type of statement has, of course, an importance of its own, but it needs to be supplemented by separate statements giving the details of the major components on the revenue as well as the expenditure side. This implies preparation of a number of "supplementary budgets" giving say, the sale proceeds and costs in respect each of the products of the enterprise and the breakdown of costs between the major responsibility-centres which may for instance, be the different production shops in a manufacturing enterprise.

The content of these "supplementary budgets" would be determined with reference to the overall perspective which the management has to have in view in using the budget as an instrument of communication and control. This perspective would, in turn be given by the overall objectives, commercial as well as non-commercial, which the management has to pursue. It is difficult to make any generalisation about the implications of non-commercial objectives from this point of view. But the implication of commercial objectives is obvious viz., the content of these supplementary budgets should be such as to enable the management to assess (i) the ultimate causes of the variance between the observed and budgeted estimates and (ii) the bearing of the variance on the profit-ability of the enterprise.

An increase in cost over the budgeted amount may, for

instance, be due to increase in input prices as well as increase in consumption of inputs over the budget standards. In order that the management is able to ascertain the exact reasons for the variance, the "supplementary budget" relating to the costs in question should indicate the assumptions in respect of the input-prices and consumption-standards on the basis of which costs are estimated. Similarly, the "supplementary budgets" in respect of the sale proceeds of each product of the enterprise must indicate the assumptions regarding the expected prices of the product in question, underlying the estimates of the sale proceeds.

Apart from these "supplementary budgets" relating to the operations of the enterprise, the public enterprises may well adopt the practice of projecting profit and loss accounts, and balance sheets. While there are instances of a few-rather very few-enterprises preparing some rudimentary kind of profit and loss statements alongwith the budget, it is doubtful if any enterprise takes care to prepare a balance-sheet for the close of the budget period. Further, it might be useful if alongwith the budget for the normal budget period, the enterprises also prepared a budget for a longer period, covering a number of budget periods. Thus, alongwith the annual budget, a five-yearly budget might also be prepared. The main advantage of this practice would be that

it would provide a basis for the evaluation of the performance of the management at regular intervals.

A reform of the existing budgetary procedures on the lines suggested above, should not necessitate any major alteration in the organisational machinery existing in the public enterprises at present. Steps may however be taken to effect a greater measure of co-ordination between the statistical, budgeting and planning units in the enterprises. There is an obvious case for strengthening the statistical units in public enterprises for meaningful analysis and reporting of data, which is an important pre-requisite of an effective system of budgetary controls.

It would appear that the focus of the suggestions made in the preceding paragraphs is in the main on two points. The first is that there is need for redesigning budgetary classifications in the public enterprise budgets on the lines of performance budgeting. The second is that budgeting in public enterprises should be in greater detail so as to meet the requirements of a business undertaking. The Estimates Committee of the Second Lok Sabha had long back recommended that public undertakings should prepare performance cum-programme statements alongwith their budgets and that they should take steps towards introducing business

type budgets. The committee, however, did not spell out in any detail what it meant by business type budgets. There is no standard pattern of business-budgeting. Perhaps, it would not be feasible to lay down any such standard pattern. It might perhaps be possible to discern a certain measure of uniformity in the philosophy underlying the budgetary practices of business undertakings a philosophy which is significantly different from that underlying the traditional type of budgeting. If the need for orientation in this philosophy (and thereby the pattern of objectives that the public enterprises are following) is accepted, what has been submitted above by way of suggestions logically follows. Whether it is known as a reorientation towards business type budgeting is a matter of secondary importance.